

REMARKS

Applicant submits the following comments in response to the Advisory Action of September 2, 2005. All arguments presented in the August 4, 2005 Amendment are incorporated herein.

In regard to the claim amendments of the August 4, 2005 Amendment, the Examiner maintains that the amended claims exclude the registration of user authentication information. Claim 1, however, specifically recites, “registering a numerical calculation method, . . . , as user authentication information.” (emphasis added). Although the language is rephrased for clarification, the claims are still directed towards registering user authentication information.

The Examiner also maintains that the claims now disclose that the claimed numerical calculation method constitutes the user authentication information together with the user identification information. The portion cited by the Examiner, however, has not been substantively amended. Rather, the only amendment was to remove the term “said” for antecedent basis reasons. For example, in claim 1, the phrase previously recited, “as said user authentication information together with user identification information corresponding to said user.” After the amendment, the claim recites (with amendment shown), “as ~~said~~ user authentication information together with user identification information corresponding to said user.” The phrase “together with” is recited in the claim before and after the amendment.

In view of the above, Applicant again submits that the amendments to the claims are for clarification purposes, were not made in view of the prior art, and do not alter the scope of the claims.

In regard to the Examiner's comments regarding the Khello reference, Applicant submits the following remarks.

Khello discloses, *interalia*, a basic encoding/decoding process for protecting a PIN number from fraud, computer hackers, etc. (col. 1, lines 5-9). For example, a user enters a PIN number into a UAS encoding device 22, and the encoding device automatically encodes the PIN before sending it to the service application center via a network (col. 6, lines 10-30). The service application center then decodes the encoded PIN number to determine if the user is authorized to use a respective service (col. 8, lines 37-41).

Khello, however, fails to teach or suggest the claimed "arbitrary numeric value." In particular, there is no arbitrary numeric value that is transferred by the service application center, via the network, to the user, which is then used in a registered numerical calculation method.

Khello discloses that a random number is generated by the code generator 30 of the UAS device 22. However, the UAS device 22 does not send the random number to the user. Accordingly, even if the random number generated by the UAS device 22 discloses a type of numeric value, the random number is never sent from the UAS device 22 to the user, let alone from the actual service providing site to the user, as recited in claim 1.

Further, Khello discloses that a prompt message "enter PIN" is transmitted over the communications network to the user, and the user then enters his PIN (col. 13, lines 12-15). Applicant submits that a *prompt message* fails to teach or suggest an arbitrary *numeric value* (i.e., a message \neq a numeric value).

Also, in regard to the UAS device 22 discussed above, the random number generated by the UAS device 22 is never used by the user in a *numerical calculation method*. Rather, the generated random number is specifically used by the UAS device 22 to help encode the PIN number input by the user. As disclosed in Khello, the user only needs to remember the PIN number, and it is the UAS device 22 that generates a coded and encrypted PIN (col. 6, lines 20-30; col. 9, lines 42-29).

Finally, even if Applicant assumes *arguendo* that the encoded PIN number discloses the claimed first calculation result (by virtue of the calculation method used to encode the data), and the decoded PIN number discloses the claimed second calculation result (by virtue of the calculation method used to decode the data), the reference still fails to teach or suggest the claimed features. For example, claim 1 recites that the user becomes authorized when the first calculation result equals the second calculation result. Since the encoded PIN number (i.e. a long string of numbers) fails to equal the decoded PIN number (i.e. the basic PIN number), the user of Khello would never become authorized based on the method recited in claim 1.

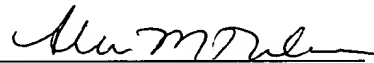
Since independent claims 2, 3, 9, 10 and 11 contain features that are analogous to the features recited in claim 1, Applicant submits that such claims are patentable for at least analogous reasons as presented above. In addition, since claims 4-8 and 12-21 are dependent upon one of claims 1, 2, 3, 9, 10 and 11, Applicant submits that such claims are patentable at least by virtue of their dependency.

Response under 37 C.F.R. § 1.114(c)
U.S. Application No. 09/845,319

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Allison M. Tulino
Registration No. 48,294

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE

23373

CUSTOMER NUMBER

Date: October 5, 2005